MA331B — STEEL MILL PRODUCTS

DEFINITIONS AND SPECIAL INSTRUCTIONS

1. Scope of survey

This survey covers all known producers of steel mill products.

2. Figures to be reported

Companies with more than one establishment manufacturing the products covered by this survey are requested to complete a separate report form for each location. If you have not received a separate form for each of your establishments, please call the contact shown on the report form or write to the U.S. Census Bureau for additional forms.

a. Quantity and value of shipments

The figures on quantity and value of shipments should include the physical shipments of all products sold, transferred to other establishments within your company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to your own branches should be assigned the same value as comparable sales to unaffiliated customers, i.e., the value includes an appropriate allocation of company overhead and profit. Products bought and resold without further manufacture should not be included in comments.

Blast furnace and steel mills industry (NAICS 331111) — Establishments engaged in manufacturing the following products should report: ingot (raw steel) and semifinished shapes (blooms, billets, slabs, etc.) (3311113); hot rolled sheet and strip, including tin mill products (3311115); hot rolled bars and bar shapes, plates, structural shapes and piling (3311117); wire made in plants producing wire rods or hot rolled bars (3311119); pipe and tubes made in plants producing semifinished shapes or plate (331111B); cold rolled steel sheet and strip made in plants producing hot rolled sheet or strip (331111D); cold finished steel bars and bar shapes made in plants producing hot rolled bars and bar shapes (331111F); and other steel mill products, except wire products (331111L).

Steel wire and related products industry (NAICS 331222) — Establishments drawing wire from purchased rods, bars, or wire and which may be engaged in the further manufacture of products made from wire. This survey will require quantity and value of shipments of wire shipped as wire (3312225) and quantity and value of shipments of eight selected wire products as listed in the item description. Manufacturers producing all other wire products should report the quantity of steel wire consumed in manufacturing these other products.

Cold finishing of steel shapes industry (NAICS 331221) — Establishments engaged in manufacturing cold rolled sheet and strip from purchased hot rolled sheet (3312211) and establishments producing cold drawn steel bar shapes from purchased hot rolled steel bars (3312213).

Steel pipe and tubes industry (NAICS 331210) — Establishments engaged in the production of welded or seamless steel pipe and tubes from purchased material (3312100).

If you did not produce any of the products listed in the item description as a final product or as an intermediate step in the production of your final product and you did not operate a steel furnace, you are not included in this survey. Please indicate in the remarks section what products you do produce and return the form.

b. Columnar structure of report

SECTION IA — STEEL PRODUCTS RECEIVED, CONSUMED, AND SHIPPED (Item codes 1100 through 3999)

Column (1); Domestic receipts — Producers should report the products listed in the item description which were received from interplant transfer and from purchase for use in producing products listed. Exclude imported products, items bought for "resale" and sold without further manufacture, and steel received for capital addition to plant. Receipts from service centers should be limited to tonnage received by the service centers from domestic producers. (Receipts of imported steel mill shapes should be reported in section IB.) Report quantity of steel consumed in short tons.

Column (2); Steel consumed in this plant — Report the specific steel mill shapes used for fabricated products or maintenance, repair, and operating supplies. Please note that fabricated products are those products not specifically listed in the item description. Examples of fabricated products are steel castings, steel forgings, electrical conduit wire, etc.

Columns (3) and (4); Total shipments including interplant transfers—The figures on quantity and value of shipments should include the physical shipments of all products sold, transferred to other establishments within your company, shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to your own branches should be assigned the same value as comparable sales to unaffiliated customers, i.e., the value includes an appropriate allocation of company overhead and profit. Products bought and resold without further manufacture should not be included in shipments.

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DEFINITIONS AND SPECIAL EXPLANATIONS — Continued

SECTION IB — IMPORT RECEIPTS (Item code 5999)

Report receipts of all imported steel mill shapes by grade. Exclude domestic receipts as reported in section IA. Receipts of mill shapes purchased from U.S. steel producing companies should be reported as domestic receipts unless the mill shapes were originally purchased by the U.S. producers from imports and were resold to secondary producers without further manufacture. Secondary producers should report the receipts of these materials as import receipts.

Column (1) — Report the sum of import receipts shown in columns (2), (3), and (4).

Column (2) — Report carbon steel.

Column (3) — Report alloy steel.

Column (4) — Report stainless steel.

SECTION II — PRODUCTION OF RAW STEEL BY TYPE OF FURNACE BY GRADE (Item codes 6100–6900) — Report total production of raw steel by type of furnace and by grade. If you do not have a steel furnace, please ignore this section.

3. Definitions

Report the items in accordance with the definitions used in the reports of the American Iron and Steel Institute (AISI). These definitions should be applied to what is reported as carbon, alloy, and stainless steel, as well as to the differentiation among sheet, strip, bars, etc. (Refer to "Instructions for Reporting Steel Shipment Statistics," volume 1, AISI 10 series.)

a. CARBON STEEL

All ferrous materials other than alloy and stainless which are usefully malleable and which contain by weight 2 percent or less of carbon. (In effect, all steel other than that complying with the definition for alloy or stainless.)

High strength steel (Carbon)

Flat-rolled of a thickness of less than 3 mm (approx. 1/8) and having a minimum yield point of 275 MPa (approx. 42 KSI) or of a thickness of 3 mm or more and having a minimum yield point of 355 MPa (approx. 56 KSI).

Note: In all carbon steels small quantities of certain residual elements, such as copper, nickel, molybdenum, chromium, etc., are unavoidably retained from raw materials. Those elements are considered as incidental.

b. ALLOY STEEL

Steels not complying with the definition of stainless steel and containing by weight one or more of the following elements in proportion shown:

0.3	percent or more of	aluminum		
0.0008	percent or more of	boron		
0.3	percent or more of	chromium		
0.3	percent or more of	cobalt		
0.4	percent or more of	copper		
0.4	percent or more of	lead		
1.65	percent or more of	manganese		
0.08	percent or more of	molybdenum		
0.3	percent or more of	nickel		
0.06	percent or more of	niobium		
0.6	percent or more of	silicon		

Heat Resisting Steel

Alloy steels containing by weight less than 0.3 percent of carbon and 4 percent or more but less than 10.5 percent of chromium.

Tool Steel

Alloy steels which contain the following combinations of elements in the quantity by weight respectively indicated:

- (i) More than 1.2% carbon and more than 10.5% chromium; or
- (ii) Not less than 0.3% carbon and 1.25% or more but less than 10.5% chromium; or
- (iii) Not less than 0.85% carbon and 1% to 1.8% inclusive, manganese; or
- (iv) 0.9% to 1.2%, inclusive, chromium and 0.9% to 1.4%, inclusive, molybdenum; or
- (v) Not less than 0.5% carbon and not less than 3.5% molybdenum; or
- (vi) Not less than 0.5% carbon and not less than 5.5% tungsten

Note: Include valve steel for reporting purposes.

c. STAINLESS STEEL

Alloy steels containing by weight 1.2 percent or less of carbon and 10.5 percent or more of chromium, with or without other elements and a minimum of 50 percent iron. However, all tool steel and valve steel should be excluded.

Also include any steel of an **analysis** which falls readily into one of the grade groups tabulated in tables 1 and 2 of the STEEL PRODUCTS MANUAL FOR TOOL STEEL dated September 1988.

DEFINITIONS AND SPECIAL INSTRUCTIONS — Continued

4. Comparability

Data reported in this survey should correspond to data reported in the Economic Census - Manufacturing Sector form. The sum of values for item codes shown in column (a) should correspond to dollar values reported under product codes indicated in column (b) below:

Current Industrial Reports (Form MA331B)	Economic Census - Manufacturing Sector		
Item codes (a)	Product codes (b)		
1110 through 1245 2110 through 2241 3110 through 3225	3311113 <u>100</u>		
1323,1355,1360,1370,1385, 1390,1420,1430,1445,1450, 2321,2333,2375,2391,3335	3311115 <mark>100</mark>		
1313 and 1314 1506 through 1546, 2314,2316,2318,2520,2530, 2535, 3320 and 3525	3311117 100		
1741 through 1771, 2707, 3710 through 3740	3311119 100 3312225 100		
1636 and 1696 2641 through 2649 3610 through 3660	331111B 100 3312100 100		
1324,1397,2327,2393,3339	331111D 100 3312211 100		
1551,2525, and 3550	331111F 100 3312213 100		
1571 through 1616	331111L 100		
1783	3312221 110		
1787	3312221 112		
1788	3312221 214		
1784, 1786	3312221 222		
1791	3312223 101		
1792	3312223 103		
1793	3312223 105		
1794	3312223 107		
1795	3312223 109		
1796	3312223 111		
1797	3312223 113		

DEFINITIONS AND SPECIAL INSTRUCTIONS — Continued

4. Comparability (cont.)

Data reported in this survey should correspond to data reported in the Economic Census - Manufacturing Sector form. The sum of values for item codes shown in column (a) should correspond to dollar values reported under product codes indicated in column (b) below:

Current Industrial Reports (Form MA331B)	Economic Census - Manufacturing Sector		
Item codes (a)	Product codes (b)		
1798	3312223 122		
1799	3312223 124		
1800	3312223 126		
1801	3312223 128		
1778	3312227 101		
1779	3312227 110		
1780	3312227 112		
1889	3312229 110		
1890	3312229 112		
1777	331222B 110		
1781	331222B 120		
1782	331222B 122		
1789	331222B 124		
1790	331222B 126		

REFERENCE LIST

FORM MA331B STEEL MILL PRODUCTS					
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Product code	Item code	Item description	Product code	Item code	Item description
		Section IA — STEEL			Rails, wheels, & track accessories:
		PRODUCTS RECEIVED, CONSUMED, AND SHIPPED	331111L110	1571	Rails: Standard tee (over 60 lbs. per
		CARBON STEEL	331111L120	1586	yard) All other rails, including light (60 lbs. per yard and under)
3311113110	1110	Ingots	331111L130 331111L140	1591 1601	Joint bars Tie plates
3311113140	1210	Semifinished products Blooms, billets, sheet bars, tin mill bars, tube rounds, and skelp	331111L150 331111L160 331111L170	1606 1611 1616	Wheels (rolled and forged) Axles (rolled and forged) Track spikes
3311113190	1230	Wire rods			Pipe and tubes:
3311113150 3311117110	1245	Slabs Finished products Plates, cut lengths	3312100110 3312100120 3312100130	1636 1641 1646	Line pipe: 16" O.D. and under Over 16" O.D. Oil country goods Pressure tubing:
3311117120	1314	Plates, in coils	3312100150 3312100160	1651 1666	Seamless Welded
3311115110	1323	Sheet: Hot rolled, including hot	33121001A0	1671	Mechanical tubing: Seamless
3312211110	1324	rolled bands Cold rolled	33121001B0 33121001F0 33121001G0	1686 1691 1696	Welded Structurals Miscellaneous, including
3311115120 3311115130 3311115140 3311115150	1355 1360 1370 1385	Sheet and strip: Galvanized: Hot dipped Electrolytic Electrical All other metallic coated, including long ternes	3312225110	1741	standard pipe Wire: Plain: Flat wire Round wire: Thermally treated:
3311115160 3312211120	1390 1397	Strip: Hot rolled Cold rolled Tin mill products:	3312225120 3312225130 3312225140 3312225150 3312225160	1742 1743 1744 1745 1746	Under 1.5mm in diameter 1.5mm or above Other round wire: Under 1.5mm in diameter 1.5mm or above Other shape wire
33111151C0 33111151D0	1420 1430	Black plate Electrolytic and hot dipped tin plate			Plated or coated with zinc: Round wire:
33111151E0 33111151F0	1445 1450	Tin free steel All other tin mill products, including short ternes and foil	3312225170 3312225180 3312225190	1763 1764 1766	Under 1.5mm in diameter 1.5mm or above Other shape wire, including flat wire
3311117130 3311117140	1506 1508	Structural shapes (heavy): Wide flange Standard	33122251A0 33122251B0 33122251C0	1767 1768 1771	Other coated wire: Flat wire Round wire Other shape wire
33111171E0	1512	Sheet piling and bearing piles			Wire products:
3311117190	1516	Bars: Hot rolled, except concrete	3312221110	1783	Wire rope, cable, and strand: Wire rope and cable
33111171A0 33111171B0 3312213110	1521 1546 1551	reinforcing Light structurals, under 3" Concrete reinforcing Cold finished	3312221112 3312221214	1787 1788	Wire rope assemblies, including lifting slings Wire forms and composite rope and cable

REFERENCE LIST — Continued

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Product code	Item code	Item description	Product code	Item code	Item description
		Section IA — STEEL PRODUCTS RECEIVED, CONSUMED, AND SHIPPED — Continued	331222B124 331222B126	1789 1790	Garment hangers Other wire products, including guards, baskets, florists' designs, paperclips, kitchenware, wire shelving, wire racks, wire chain,
3312221230 3312221240	1784 1786	Wire strand: For prestressed concrete Other, including composite wire			wire carts, wire cages, etc. ALLOY STEEL
		strand, except ACSR, and guard rail cable	3311113120	2110	Ingots
		Nails, staples, tacks, spikes, and brads:			Semifinished products
3312223101	1791	Round wire nails, collated, prepackaged Round wire nails, not	3311113160	2237	Blooms, billets, sheet bars, tube rounds, and skelp
		collated, smooth shank:	33111131A0	2239	Wire rods
3312223103	1792	Coated, plated, or painted: Galvanized	3311113170	2241	Slabs
3312223105	1793	Vinyl, resin or cement coated			Finished products
3312223107 3312223109	1794 1795	Other Not coated, plated or	3311117150	2314	Plates, cut lengths
00.1220.00		painted Round wire nails, not	3311117160	2316	Plates, in coils
		collated, other than smooth shank:	3311117170	2318	Structural shapes, 3" and under
3312223111 3312223113	1796 1797	Coated, plated or painted Not coated, plated, or painted	3311115170 3312211130	2321 2327	Sheet: Hot rolled Cold rolled
3312223122	1798	Steel cut nails, including horseshoe nails			Sheet and Strip:
3312223124 3312223126 3312223128	1799 1800 1801	Steel wire staples Steel tacks, wire and cut Steel spikes and brads, including track spikes	3311115180 3311115190	2333 2375	Galvanized hot dipped All other metallic coated, including electrolytic Strip:
3312227101	1778	Fencing and fence gates:	33111151A0 3312211140	2391 2393	Hot rolled Cold rolled
		Chain link fencing, including galvanized and plastics	2244447400	2522	Bars:
3312227110	1779	coated Wire fence, woven and welded, including galvanized	33111171C0 3312213120	2520 2525	Hot rolled, including structural shapes under 3" Cold finished
3312227112	1780	welded, including galvanized and plastics coated Fence gates, posts, and	3312213120	2323	Tool steel:
3312227112	1700	fittings and ornamental lawn fence	33111171F0 33111171G0	2530 2535	High speed Other than high speed
3312229110 3312229112	1889 1890	Woven wire products: Woven wire netting Other woven wire products	3312100140 3312100170 33121001C0	2641 2643 2646	Pipe and tubes: Oil country goods and line pipe Pressure tubing Mechanical tubing
331222B110	1777 1781	Other wire products: Barbed and twisted wire Bale ties	33121001H0	2649	Miscellaneous including standard and structural
331222B120 331222B122	1781	Welded steel wire fabrics, including concrete reinforcing mesh	33122251D0	2707	Wire, plain or coated

REFERENCE LIST — Continued

FORM MA331B		KLI LKENCE	: LIST — Contin	ucu	
Product code	Item code	Item description	Product code	Item code	Item description
		Section IA — STEEL PRODUCTS RECEIVED, CONSUMED, AND SHIPPED — Continued	xxx	5999	SECTION IB — IMPORT RECEIPTS OF STEEL MILL PRODUCTS BY GRADE
		STAINLESS STEEL			SECTION II — PRODUCTION OF RAW STEEL BY TYPE OF FURNACE
3311113130	3110	Ingots	xxx	6100	Basic oxygen
3311113180	2000	Semifinished products	xxx	6205	Open hearth
3311113180	3220	Blooms, billets, slabs, sheet bars, tube rounds, and skelp	xxx	6500	Electric
33111131B0	3225	Wire rods	XXX	6700	Other — Specify
		Finished products	XXX	6900	TOTAL PRODUCTION OF RAW STEEL BY TYPE OF FURNACE
3311117180	3320	Plates and structurals			OTELE BY THE OF TORRAGE
33111151B0 3312211150	3335 3339	Sheet and strip: Hot rolled Cold rolled			
33111171D0 3312213130	3525 3550	Bars: Hot rolled Cold finished			
3312100180 3312100190 33121001D0 33121001E0	3610 3620 3630 3640	Pipe and tubes: Pressure tubing: Seamless Welded Mechanical tubing: Seamless Welded Othersies and tubos			
33121001F0	3660	Other pipe and tubes Wire: Round wire:			
33122251E0 33122251F0 33122251G0	3710 3720 3730	Under 0.75mm in diameter 0.75mm to under 1.5mm I.5mm and above			
33122251H0	3740	Other shape wire, including flat wire			